COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE

4949A Cox Road, Glen Allen, Virginia 23060

(804) 527-5020 Fax (804) 527-5106

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

September 29, 2014

Mr. Harold S. Thacker
Director of Post Collections Operations
WM Atlantic Waste Disposal, Incorporated
3474 Atlantic Lane
Waverly, VA 23890

Location: Sussex County
Registration No.: 51278
County-Plant ID No. 183-0036

Dear Mr. Thacker:

Attached is a Title V renewal permit to operate your municipal solid waste landfill pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete on July 31, 2014 and solicited written public comments by placing a newspaper advertisement in the *Sussex Surry Dispatch on August 13, 2014*. The thirty (30) day comment period (provided for in 9 VAC 5-80-270) expired on September 12, 2014, with no comments having been received in this office. The US EPA forty-five (45) day concurrent comment period expired on September 28, 2014, with no comments having been received in this office.

This approval to operate does not relieve Atlantic Waste Disposal, Inc. of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this renewal permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please call (804) 527-5020.

Sincerely,

James E. Kyle, P.E.
Regional Permit Manager

JEK/hll/ 51278TitleVPermit_Final09292014.docx

Attachment: Permit
40 CFR 60, NSPS Subpart WWW
40 CFR 63, MACT Subpart AAAA
40 CFR 63, MACT Subpart ZZZZ
40 CFR 63, MACT Subpart CCCCCC
40 CFR 60, NSPS Subpart IIII (For information)
HAP Attachment A

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Chief, Permits and Technical Assessment Branch (3AP11), U.S. EPA, Region III

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Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Atlantic Waste Disposal, Inc.
Facility Name:	Atlantic Waste Disposal Landfill
Facility Location:	3474 Atlantic Lane Waverly, Virginia
Registration Number:	51278
Permit Number:	PRO-51278

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Sections I through VIII)
State Only Enforceable Requirements (Section IX)

Effective Date: September 29, 2014
Expiration Date: September 28, 2019

Kyle Ivar Winter, P.E.
Deputy Regional Director, Department of Environmental Quality

Signature Date: September 29, 2014

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I. **Facility Information**
Permittee/Facility Name:
Atlantic Waste Disposal, Inc.
Atlantic Waste Disposal Landfill
3474 Atlantic Lane,
Waverly, VA 23890

Responsible Official
Mr. Harold S. Thacker
Director of Disposal Operations
(804)727-9017

Contact Person
Mr. Jason Williams
Environmental Protection Manager
(804)814-5586

County Plant ID No.: 51-183-0036

Facility Description: NAICS 562212 – the municipal solid waste landfill is owned by Sussex County and operated by Atlantic Waste Disposal, Inc. (AWDI).

The landfill opened in July 1994 and can receive waste by rail or road. The waste deposited at the landfill is from municipalities within and outside the Commonwealth of Virginia. Only certain waste types are allowed under Solid Waste Permit #562 at the facility Some of these waste types include the following: municipal solid waste, industrial waste, refuse, institutional waste (except anatomical, infectious, or pathological waste), commercial waste, garbage, compost, debris (wood, brush, leaves), sludges (including water treatment plant sludges with no free liquids and wastewater treatment plant sludges that have been stabilized, digested or heat treated), demolition waste, and scrap metal. The following wastes are prohibited according to Solid Waste Permit #562: regulated hazardous wastes, dioxin wastes, PCB wastes, asbestos waste, lead acid batteries, nuclear, nuclear by-product or waste material, flammable or explosive waste, non-hazardous, domestic irrigation return flows, and industrial point source discharges.

The facility is a Title V major source for NMOC. This source is located in an attainment area for all pollutants, and is a PSD major source for CO. The landfill became an active gas collection site on October 21, 2000. The landfill is subject to applicable requirements listed in 40 CFR 60, Subpart WWW of the New Source Performance Standards (NSPS) "Standards of Performance for Municipal Solid Waste Landfills" because it was constructed after the effective date of May 30, 1991, and its permitted design capacity exceeded 2.5 million meters cubed. The requirement to submit an initial Gas Collection and Control System (GCCS) design plan, as stated in 40 CFR 60.757(c), was completed on about April 1999 (Initial GCCS plan approval was on March 12, 2001 and last plan approval was November 20, 2008). The initial design capacity report was submitted on April 21, 1998 per March 2, 2001 GCCS Design Plan (exceeded 50 Mg per year CY 1997 prior to GCCS Design Plan submission). Landfills subject to NSPS Subpart WWW are also subject to the requirements of MACT Subpart AAAA of the "National Emissions Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills." The landfill is also subject to Title V permitting due to its applicability to NSPS Subpart WWW and MACT Subpart AAAA.

The initial Title V permit was issued on January 1, 2004, modified on September 9, 2005 and last renewal was on February 25, 2009. The source was issued a Prevention of Significant Deterioration (PSD) permit dated August 20, 2004 (Amended on August 5, 2014). The Solid Waste Permit #562 in amendment No. 16 dated February 26, 2014 increased landfill capacity. This expansion of the landfill, not already permitted by the PSD permit, was subject to a minor amendment to the PSD permit on August 5, 2014. Since conventional pollutants from the project did not increase above significance levels, neither new PSD permitting or PSD GHG BACT apply to the landfill. The number of flares and required throughput of LFG remained unchanged. Other uses of treated landfill gas for compression and transmission facility also remained unchanged.

For PSD purposes, the treated landfill gas compression and transmission facility, currently being operated by Eagle Hill Renewable Energy, LLC (was Waverly Gas Producers, LLC.), Registration Number 52013, is considered a support facility for the Atlantic Waste Disposal landfill. Since emissions from the flares are considered "worst case" emissions, the two landfill gas fired compressors at Eagle Hill Renewable Energy, LLC did not need to be included in the PSD permit. For the purpose of NSPS, Subpart WWW [40 CFR 60.752(b)(iii)(C)], Eagle Hill Renewable Energy, LLC provides for the routing of the collected landfill gas to a treatment system that processes the collected gas for subsequent sale or use to energy recovery device. The basis for this determination is that Eagle Hill Renewable Energy, LLC is the only means by which Atlantic Waste Disposal, Inc. can deliver the treated landfill gas to the end user. This dependent relationship meets the support facility criteria established by the EPA.

As a support facility, Eagle Hill Renewable Energy, LLC and the Atlantic Waste Disposal, Inc. landfill are to be treated as a single facility, consequently Eagle Hill Renewable Energy, LLC shall be evaluated as a major source with respect to Title V and PSD applicability.

The landfill also includes equipment that is deemed insignificant, such as the leachate storage tanks, fluid storage tanks, portable emergency generators, water heater, pumps and portable light plants. The facility has a separate minor permit to construct and operate a fly ash processing (May 13, 2010) and a container spray painting facility (September 8, 2011) on site as a support activity (both not constructed at this time). The renewal application received on July 15, 2013 was deemed timely and administratively complete. Therefore, the Title V permit application shield is in place.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description (Start up date)	Size/Rated Capacity*	Pollution Control Device Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
CF-2	CF-2	Open (candle) Flare (2000)	1' x 32'/2500 SCFM	None	N/A	N/A	August 5, 2014
CF-3	CF-3	Open (candle) Flare (2000)	1' x 32'/2500 SCFM	None	N/A	N/A	August 5, 2014
CF-4	CF-4	Open (candle) Flare (2006)	1'x 32'/3500 SCFM	None	N/A	N/A	August 5, 2014
CF-5	CF-5	Open (candle) Flare (TBD)	1'x 32'/3500 SCFM	None	N/A	N/A	August 5, 2014
CF-6	CF-6	Open (candle) Flare (TBD)	1'x 32'/3500 SCFM	None	N/A	N/A	August 5, 2014
Landfill Operations							
Cells 1, 2, 2A, 3, 3A, 4, 4A, 5A, 5B, 6A, 6B, 7A, 7B, 7C, 8A, 8B, 9A, 9B, 10A, 10B, 10C, 11A, 11B, 11C, 12A, 12B, and 12C.	LFO-1	Landfill Operations, incl. a Gas Collection and Control System	99,003,792 m^3 (129,484,426 cu yards)	GCCS	CF-2, CF-3, CF-4, CF-5, CF-6	NMOC's, VOC, HAPs	August 5, 2014
Permitted Landfill Support Activities							
Fly Ash Processing	P-1 P-2 S-1 S-2 S-3 S-4 C-1 C-2	Pug Mill Pug Mill Silo Silo Silo Silo Conveyor Conveyor	150 TPH 150 TPH 100 Tons 100 Tons 100 Tons 100 Tons 300 TPH 300 TPH (Total0	Wet Suppression Wet Suppression Fabric Filter Fabric Filter Fabric Filter Fabric Filter Wet Suppression Wet Suppression	P1-P2 S1-S4 C-1-C-2	PM, PM-10	Exempt Exempt May 13, 2010
Container Painting System	CP-1 CP-2	High Volume Low Pressure (HVLP) spray gun using non-HAP coatings	1 gallon/ hour	Low VOC paint	CP-1 CP-2	PM, PM-10, VOC	September 8, 2011
T-10	NA	Gasoline Storage Tank	500 gallons	None	N/A	VOC	Exempt when installed.
EGEN-2	EGEN-2	Kohler Emergency Generator – diesel (Built 1995)	226.0 Hp	None	N/A	PM, PM-10, CO, NOx, SO2, VOC	Exempt when Installed.

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement. The rated capacity for the "Landfill Operations" is the volumetric capacity indicated in the August 5, 2014 amended PSD permit, converted to cubic meters.

III. Landfill Operations and Fuel Burning Equipment Requirements – (emission units CF-2, CF-3, CF-4, CF-5, CF-6, EGEN-2 and LFO-1)

A. Limitations

As used in this section, all terms shall have the meaning as defined in 40 CFR 60.2, 40 CFR Part 60 Subpart A, 40 CFR 60.751 (NSPS WWW) and 40 CFR 63.1990 (MACT AAAA). Copies of 40 CFR Part 60 Subpart A, 40 CFR Part 60 Subpart WWW and 40 CFR Part 63 Subpart AAAA are attached.

1. **NSPS Subpart WWW** – The municipal solid waste landfill and the GCCS shall be constructed and operated in accordance with 40 CFR 60 Subpart WWW. The provisions of this subpart apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed five days for collection systems and shall not exceed one hour for treatment or control devices.

   (9 VAC 5-80-110, 40 CFR 60.750 through 40 CFR 60.759, and Condition 12 of the NSR PSD permit dated 08/05/2014)

2. **MACT Subpart AAAA** – The Landfill MACT(40 CFR 63 Subpart AAAA) includes the following additional requirements for affected MSW landfills.

   a. A "Startup, shutdown and malfunction" (SSM) Plan shall be developed and implemented for the facility. [40 CFR 63.6(e)(3) and 40 CFR 63.1960]

   b. Reports required by 40 CFR 63, Subpart AAAA, shall include the following:

      (1) Semiannual startup, shutdown and malfunction plan reports:
      If actions taken during a startup, or shutdown or malfunction plan are consistent with the procedures in the startup, shutdown and malfunction plan, this information shall be included in a semi-annual startup, shutdown and malfunction plan report. Such a report shall also include the number, duration and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limit to be exceeded. Reports shall only be required if a startup or shut down caused the source to exceed any applicable emissions limitation in the relevant emissions standards, of if a malfunction occurred during the reporting period.

      (2) Any time an action taken during a startup, or shutdown or malfunction is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event.

   [Except where this permit is more restrictive than the applicable requirement, the MSW landfill shall be operated in accordance with 40 CFR 63, Subpart AAAA.]

   (9 VAC 5-80-110, 40 CFR 63.1930 through 63.1990, 40 CFR 63.10(d)(5), 40 CFR 63.6(e)(3)(iv) and Condition 15 of the NSR PSD permit dated 08/05/2014)

3. **Design Capacity** - The design capacity of the MSW landfill (LFO-1), which includes Cells 1, 2, 2A, 3, 3A, 4, 4A, 5A, 5B, 6A, 6B, 7A, 7B, 7C, 8A, 8B, 9A, 9B, 10A, 10B, 10C, 11A, 11B, 11C, 12A, 12B, and 12C, is 114,515,060 yd^3 with an assumed maximum compaction of 1900 lbs/yd^3. A change in the design capacity may require a permit to construct and operate.

   (9 VAC 5-80-110 and Condition 3 of the NSR PSD permit dated 08/05/2014)

4. **Dates of Construction** – Construction of the new cells shall begin according to the following dates:

Cells 2A-4A	August 1, 2021
Cells 7	June 1, 2028
Cells 8	May 1, 2042
Cells 9	November 1, 2044
Cells 10	November 1, 2051
Cells 11	January 1, 2024
Cells 12	July 1, 2015

   If construction of the cell has not commenced within 18 months after the date shown above, the permit could become invalid (see Condition **III.A.7**). Construction commencing prior to the date listed shall apply BACT as described in Condition **III.A.6**. An amended permit application should be submitted to the Piedmont Regional Office to change or remove the dates from the permit (see Condition **III.A.8**).

   (9 VAC 5-80-110 and Condition 4 of the NSR PSD permit dated 08/05/2014)

5. **Emissions Evaluation for Phased Construction** - Any application for construction, reconstruction, or modification of this facility submitted subsequent to the application dated February 5, 2003 received by DEQ shall include an analysis of the effect of the construction, reconstruction, or modification on the facility-wide emissions and a determination of the effect of the project on plant-wide production capacity. Further emissions increases related to this construction, reconstruction, or modification shall be evaluated together with the August 20, 2004 PSD emissions to determine whether such activities are subject to any applicable provisions of 9 VAC 5 Chapter 80, Articles 6, 8 and 9 of the State Regulations.

   (9 VAC 5-80-110 and Condition 9 of the NSR PSD permit dated 08/05/2014)

6. **BACT Evaluation for Phased Construction** - The emission controls required by this permit will be reevaluated in conjunction with future submittals related to the phased construction activities covered in this permit no later than 18 months prior to the commencement of construction for each phase of the project. Future emission reduction strategies determined to be applicable to future phased construction activities may require amending this permit.
   (9 VAC 5-80-110 and Condition 10 of the NSR PSD permit dated 08/05/2014)

7. **Permit Invalidation for Phased Construction** – The NSR PSD permit shall become invalid if the program of construction, reconstruction, or modification is discontinued for a period of 18 months or more. Each phase of an approved plan of construction in phased increments shall commence construction, reconstruction, or modification no more than 18 months after the projected and approved date for each phase of the construction as listed in Condition **III.A.4**.

   (9 VAC 5-80-110 and Condition 44 of the NSR PSD permit dated 08/05/2014)

8. **Amendments to Construction Start Date** - If modification of the landfill is not commenced eighteen months after the dates submitted with the application dated February 5, 2003 (with amendment information dated July 2, 2003) and as listed in Condition **III.A.4**, if it is discontinued for a period of eighteen months, or if the permittee does not intend to begin actual construction on any Cell within 18 months after the date submitted with the application (letter dated July 2, 2003), the permittee shall submit a permit amendment request, including a revised Form 7, to remove the project from the list of projects included in this phased construction permit or change the anticipated construction start date.

   (9 VAC 5-80-110 and Condition 45 of the NSR PSD permit dated 08/05/2014)

9. **The Gas Collection and Control System (GCCS)** - The permittee shall operate an active collection and control system approved by the Department that captures the gas generated within the landfill. The GCCS installed at the Atlantic Waste Disposal Landfill shall be certified under 40 CFR 60.759(a)(1). The active collection system shall be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment [40 CFR 60.752(b)(ii)(A)(*1*)]. The system shall be designed and operated to collect gas from each cell in the landfill in which solid waste has been placed for a period of 5 years or more if active or 2 years or more if closed or at final grade [40 CFR 60.752(b)(ii)(A)(2) and 60.753(a)]. The system shall collect gas at a sufficient extraction rate to meet all operational requirements of this permit and 40 CFR 60 Subpart WWW [40 CFR 60.752(b)(ii)(A)(*3*)]. The system shall be designed to minimize the off-site migration of subsurface gas [40 CFR 60.752(b)(ii)(A)(*4*)]. The permittee shall submit an updated design plan for the GCCS whenever changes or additions are made to the system.

   (9 VAC 5-80-110, 40 CFR 60.752 (b)(2)(ii)(A), 40 CFR 60.752(b)(2)(iv), 40 CFR 60.759(c) and 40 CFR 60.753(a) and Condition 5 of the NSR PSD permit dated 08/05/2014)

10. **Specifications for Active Collection System –** The permittee shall site and construct the active collection wells, horizontal collectors, surface collectors, and vertical wells in a manner consistent with the active gas collection and control system design plan most recently submitted and approved by the Piedmont Regional Office

    (9 VAC 5-80-110, 40 CFR 60.759 and Condition 13 of the NSR PSD permit dated 08/05/2014)

11. **NMOC Controls** - The collection system shall be operated such that all collected gas is routed to the control system where it is combusted by non-assisted type open flares (CF-2 through CF-6) or to a treatment system that processes the collected gas for subsequent sale or use as described in 40 CFR 60.752(b)(2)(iii)(C). The open flares shall be designed and operated in accordance with 40 CFR 60.18 [40 CFR 60.752(b)(2)(iii)(A)]. Any emissions from any atmospheric vent from the gas treatment system shall be routed to the control system and combusted by the open flares. Open flares CF-2 through CF-6 shall meet the criteria in 40 CFR 60.18. The net heating value for the landfill gas being combusted shall be 200 Btu/scf or greater as determined by methods listed in 40 CFR 60.18(f)(3) or other methods approved by the Administrator. The exit velocity shall be less than 60 ft/second except when the net heating value for the landfill gas is greater than 1,000 Btu/scf **OR** the exit velocity is less than V_{MAX} and less than 400 ft/second. The exit velocity shall be determined using the applicable methods listed in 40 CFR 60.18(f)(4) and 40 CFR 60.18(f)(5) or methods approved by the administrator. A change in the control system may require a permit to modify and operate.

    (9 VAC 5-80-110, 40 CFR 60.752 (b)(2)(iii), 40 CFR 60.752(b)(2)(iv), 40 CFR 60.753(e) and Conditions 5 and 6 of the NSR PSD permit dated 08/05/2014)

12. **GCCS Operation** – The permittee shall operate the collection system such that the surface methane concentration is less than 500 ppm above the background level at the surface of the landfill [40 CFR 60.753(d)]. A negative pressure shall be maintained at each active wellhead except as provided in 40 CFR 60.753(b). The permittee shall operate each interior, active wellhead in the collection system such that the gas temperature is less than 55 degrees C and with either a nitrogen level less than 20% or an oxygen level less than 5%. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens [40 CFR 60.753(c)].

    (9 VAC 5-80-110, 40 CFR 60.752(b)(2)(iv), 40 CFR 60.753(b), (c) & (d) and Condition 5 of the NSR PSD permit dated 08/05/2014)

13. **GCCS Shut down** - The permittee shall operate the GCCS such that in the event that the collection and control system is inoperable, the GCCS gas moving equipment shall be shut down and all vents to the atmosphere shall be closed within 1 hour.

    (9 VAC 5-80-110, 40 CFR 60.752(b)(2)(iv), 40 CFR 60.753(e) and Condition 16 of the NSR PSD permit dated 08/05/2014)

14. **Operational Integrity** – The permittee shall operate the control or treatment system at all times when the collected gas is routed to the system.

    (9 VAC 5-80-110, 40 CFR 60.752(b)(2)(iv) and 40 CFR 60.753(f), and Condition 16 of the NSR PSD permit dated 08/05/2014)

15. **Placement of New Wells** – The permittee shall place each well or design component as specified in the approved GCCS design plan and shall install wells no later than 60 days after the date on which the initial solid waste has been in place in any area, cell or group of cells for a period of 5 years or more if active or 2 years or more if closed or at final grade.

    (9 VAC 5-80-110, 40 CFR 60.752(b)(2)(iv) and 40 CFR 60.755(b) and Condition 5 of the NSR PSD permit dated 08/05/2014)

16. **Approved Fuels** - The approved fuel for the open flares is landfill gas. Propane fuel shall be used as necessary to ignite the flare devices. No other fuel is authorized in conjunction with the operation of the GCCS. A change in fuel may require a permit to modify and operate.

    (9 VAC 5-80-110 and Condition 17 of the NSR PSD permit dated 08/05/2014)

17. **Throughput Limit** - The five flares (CF-2 through CF-6) shall consume no more than 8,146,800,000 cubic feet of landfill gas combined per year, calculated monthly as the sum of each consecutive 12-month period.

    (9 VAC 5-80-110 and Condition 18 of the NSR PSD permit dated 08/05/2014)

18. **Open Flare Requirements** - The two LFG&E Triton Candle Flare Models TCF-2500A (CF-2 and CF-3) shall each operate within the following parameters to ensure that the vendor guaranteed carbon monoxide emission factor of 0.15 lb/MMBTU is met:

    a. A landfill gas flow rate from 250 SCFM (minimum) to 2500 SCFM (maximum).

    b. A heat input of 81.99 MMBTU/hr which shall be demonstrated using the procedures listed in Condition III.C.4.i.

    c. A methane concentration in the landfill gas from 30% (minimum) to 60% (maximum).

    (9 VAC 5-80-110 and Condition 7 of the NSR PSD permit dated 08/05/2014)

19. **Open Flare Requirements** - The three 3500 scfm Candle Flares (CF-4 through CF-6) shall each operate within the following parameters to ensure that the vendor-guaranteed carbon monoxide emission factor of 0.15 lb/MMBTU is met:

    a. A landfill gas flow rate from 350 SCFM (minimum) to 3500 SCFM (maximum) on a ten to one turndown ratio.

    b. A heat input of 114.8 MMBTU/hr, which shall be demonstrated using the procedures listed in Condition III.C.4.i.

    c. A methane concentration in the landfill gas from 30% (minimum) to 60%(maximum).

    (9 VAC 5-80-110 and Condition 8 of the NSR PSD permit dated 08/05/2014)

20. **Emission Factors** - The following emission factors (or others approved by the Piedmont Regional Office) shall be used to calculate emissions from the LFG&E Triton Candle Flares Model TCF-2500A (CF-2 and CF-3) and the three 3500 scfm Candle Flares (CF-4, CF-5 and CF-6):

Particulate Matter/PM_{10}	17.0 lbs/mmcf CH_4
Sulfur Dioxide	8.9 lbs/mmcf LFG*
Nitrogen Oxides	40.0 lbs/mmcf CH_4
Carbon Monoxide	0.15 lbs/mmBtu
Non-Methane Organic Compounds	6.5 lbs/mmcf LFG*
Volatile Organic Compounds	2.5 lbs/mmcf LFG*

*These emission factors are based on 60% methane in the LFG, which represents the maximum methane percentage the flare manufacturers will guarantee. Actual methane percentages may be less.
(9 VAC 5-80-110 and Condition 20 of the NSR PSD permit dated 08/05/2014)

21. **Emissions Limits** – Hourly emissions from the operation of each LFG&E Triton Candle Flare (CF-2 and CF-3) shall not exceed the limits specified below:

Particulate Matter/PM10	1.6 lb/hr	(9 VAC 5-50-260)
Sulfur Dioxide	1.4 lb/hr	(9 VAC 5-50-260)
Nitrogen Oxides	3.6 lb/hr	(9 VAC 5-50-260)
Carbon Monoxide	12.3 lb/hr	(9 VAC 5-50-260)
Non-Methane Organic Compounds	1.0 lb/hr	(9 VAC 5-50-260)
Volatile Organic Compounds	0.4 lb/hr	(9 VAC 5-50-260)

Emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions II, III.A.16, III.A.18 and III.A.20.

(9 VAC 5-80-110 and Condition 21 of the NSR PSD permit dated 08/05/2014)

22. **Emission Limits** - Emissions from the operation of each of the three 3500 scfm Candle Flares (CF-4, CF-5 and CF-6) shall not exceed the limits specified below

Particulate Matter/PM_{10}	2.2 lbs/hr	(9 VAC 5-50-260)
Sulfur Dioxide	1.9 lbs/hr	(9 VAC 5-50-260)
Nitrogen Oxides	5.1 lbs/hr	(9 VAC 5-50-260)
Carbon Monoxide	17.3 lbs/hr	(9 VAC 5-50-260)
Non-Methane Organic Compounds	1.4 lbs/hr	(9 VAC 5-50-260)
Volatile Organic Compounds	0.6 lbs/hr	(9 VAC 5-50-260)

Emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions II, III.A.16, III.A.19, and III.A.20.

(9 VAC 5-80-110 and Condition 22 of the NSR PSD permit dated 08/05/2014)

23. **Open Flare Emissions** – Annual emissions from the operation of the five flares (CF-2 through CF-6)) shall not exceed the limits specified below:

Particulate Matter/PM_{10}	41.6 tons/year	(9 VAC 5-50-260)
Sulfur Dioxide	36.3 tons/year	(9 VAC 5-50-260)
Nitrogen Oxides	97.8 tons/year	(9 VAC 5-50-260)
Carbon Monoxide	334.0 tons/year	(9 VAC 5-50-260)
Non-Methane Organic Compounds	26.5 tons/year	(9 VAC 5-50-260)
Volatile Organic Compounds	10.2 tons/year	(9 VAC 5-50-260)

Emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions II, III.A.16, III.A.17, III.A.18, III.A.19, and III.A.20.

(9 VAC 5-80-110 and Condition 23 of the NSR PSD permit dated 08/05/2014)

24. **Visible Emission Limit** – The five flares (CF-2 through CF-6) shall each be operated with no visible emissions, as determined by EPA Method 22, except for periods not to exceed a total of five minutes during two consecutive hours. This condition applies at all times except during startup, shutdown and malfunction.

(9 VAC 5-80-110, 40 CFR 60.18 and Condition 19 of the NSR PSD permit dated 08/05/2014)

25. **Operation/Maintenance** - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

    b. Maintain an inventory of spare parts.

    c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

    d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9 VAC 5-80-110, 40 CRF 60.11(d) and Condition 50 of the NSR PSD permit dated 08/05/2014)

26. **Emergency Generator Requirements - (emission unit ID # EGEN-2) – Limitations** - All existing emergency compression ignition (CI) stationary RICE, (EGEN-2), shall be in compliance with 40 CFR 63, Subpart ZZZZ. This unit shall comply with the following requirements, as applicable:

    a. The existing emergency stationary RICE according to the requirements in paragraphs §63.6640 (f)(1) through (4). In order for the engine to be considered an emergency stationary RICE, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs §63.6640 (f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in paragraphs §63.6640 (f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63, Subpart ZZZZ and must meet all requirements for non-emergency engines.

    (1) There is no time limit on the use of emergency stationary RICE in emergency situations.

    (2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs §63.6640 (f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs §63.6640 (f)(3) and (4) counts as part of the 100 hours per calendar year allowed by paragraph §63.6640 (f)(2). Other uses for the emergency stationary RICE (EGEN-2) are allowed but not practical because of the small 300 KW output (see §63.6640). Since this emergency stationary RICE (EGEN-2) will not be dispatched, the engine owner or operator shall keep records of the hours of operation and description of each period of operation described in §63.6640 (f)(1) through (4).

    The owner or operator of an existing emergency stationary RICE located at an area source of HAP emissions must comply with the requirements in Table 2d of 40 CFR 63, Subpart ZZZZ per §63.6603:

    b. Change oil and filter every 500 hours of operation or annually, whichever comes first (Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement in Table 2d);

    c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

    The owner or operator of an existing emergency stationary RICE located at an area source of HAP emissions, must install a non-resettable hour meter if one is not already installed (§63.6625).

    The owner or operator that elects to become contractually obligated under §63.6650(h) shall use fuel as described in §63.6604(b) and make annual reports after calendar year 2015 by March 31, 2016 (§63.6650(h). No other requirements apply.

    (9 VAC 5-80-110, §63.6603, §63.6625, §63.6640 and §63.6650)

B. Monitoring

1. **NSPS Requirements** - The landfill gas collection and control system shall be monitored and all appropriate data recorded as required in Subpart WWW (Subsection 60.756).

    (9 VAC 5-80-110 and Condition 32 of the NSR PSD permit dated 08/05/2014)

2. **MACT Requirements** - The landfill gas collection and control system shall be monitored and all appropriate data recorded as required in Subpart AAAA (Subsection 63.1930).

   (9 VAC 5-80-110, 40 CFR 63.1960, 40 CFR 63.1980 and Condition 33 of the NSR PSD permit dated 08/05/2014)

3. **Well Pressure** - The permittee shall measure gauge pressure in the header at each individual active well monthly [40 CFR 60.755(a)(3) and 60.756(a)(1)]. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days. If a negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the system shall be expanded within 120 days of the initial measurement of positive pressure. [An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.] If corrective actions are taken as specified in 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements in Condition III.A.12. Exceptions to the requirement for corrective action are listed under 40 CFR 60.753(b)(1)-(b)(3).

   (9 VAC 5-80-110, 40 CFR 60.752(b)(2)(iv), 40 CFR 60.753(g), 40 CFR 60.755(a)(3), 40 CFR 60.756(a)(1) and Condition 28 of the NSR PSD permit dated 08/05/2014)

4. **Well Parameters** - The permittee shall monitor each active well monthly for temperature and nitrogen or oxygen as provided in 40 CFR 60.753(c) [40 CFR 60.755(a)(5) and 60.756(a)(2)&(3)]. If a well exceeds one of the operating parameters stated in Condition III.A.12 of this permit, action shall be initiated to correct the exceedance within five calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. [An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.] Any attempted corrective measure shall not cause exceedance of other operational or performance standards. If corrective actions are taken as specified in 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements in Condition III.A.12.

   (9 VAC 5-80-110, 40 CFR 60.752(b)(2)(iv), 40 CFR 60.753(g), 40 CFR 60.755(a)(5), 40 CFR 60.756(a)(2) and (3), and Condition 28 of the NSR PSD permit dated 08/05/2014)

5. **Surface Monitoring** - For each collection area for which waste has been in place for two or more years if closed or at final grade or for which waste has been in place for five or more years if active, the permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a site-specific traversing pattern detailed in their updated surface monitoring design plan, and where visual observations indicate elevated concentrations of landfill gas (such as distressed vegetation and cracks or seeps in the cover). This surface methane monitoring shall take place on a quarterly basis using an organic vapor analyzer, flame ionization detector or other portable monitor meeting the specifications provided in paragraph (d) of 40 CFR 60.755. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

   (9 VAC 5-80-110, 40 CFR 60.752(b)(2)(iv), 40 CFR 60.753(d), 40 CFR 60.755(c)(1) and Condition 28 of the NSR PSD permit dated 08/05/2014)

6. **Surface Monitoring** – The background concentration of methane during surface emissions monitoring shall be determined for the instrument measuring the surface concentrations of methane by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. Surface emission monitoring shall be performed in accordance with 40 CFR 60 Appendix A, Method 21, Section 8.3, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

   (9 VAC 5-80-110 and 40 CFR 60.755(c)(2) and (c)(3))

7. **Surface Monitoring Method of Operation** – The portable analyzer used to determine the surface methane concentration shall meet the instrument specifications provided in 40 CFR 60, Appendix A, Method 21, Section 6, except that methane shall replace all references to VOC. The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air. To meet the performance evaluation requirements in section 8.1 of Method 21, the instrument evaluation procedures of Section 8.1 of Method 21, of Appendix A shall be used. The calibration procedures in Section 10 of Method 21 shall be followed immediately before commencing a surface monitoring survey.

   (9 VAC 5-80-110, 40 CFR 60.752(b)(2)(iv), 40 CFR 60.755(d) and 40 CFR 60, Method 21)

8. **Exceedances** – Any reading of surface methane of 500 ppm or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements.

   a. The location of the exceedance shall be marked and recorded.

   b. The permittee shall perform cover maintenance or make adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of the exceedance. The location shall be remonitored within 10 calendar days of detecting the exceedance.

   c. If the remonitoring of the location shows a second exceedance, the permittee shall take additional corrective action and shall monitor the location again within 10 days of the second exceedance. If the remonitoring shows a third exceedance for the location, the permittee shall install a new well or other collection device within 120 calendar days after the initial exceedance.

   d. Any location that initially showed an exceedance but has a methane concentration less than 500 ppm above background at the 10-day remonitoring shall be remonitored one month from the initial exceedance. If the one-month remonitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring. If the one-month remonitoring shows an exceedance, the permittee shall repeat the requirements of either paragraph (c) or (e) of this condition.

e. For any location where the monitored methane concentration equals or exceeds 500 ppm above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes, or control devices, and a corresponding timeline for installation may be submitted to the Director, Piedmont Regional Office and the Administrator for approval.

(9 VAC 5-80-110, 40 CFR 60.752(b)(2)(iv), 40 CFR 60.753(g), 40 CFR 60.755(c)(4)(i) through 60.755(c)(4)(v), and Condition 30 of the NSR PSD permit dated 08/05/2014)

9. **Cover Integrity** - The permittee shall implement a program to monitor for cover integrity and accomplish cover repairs as necessary on a monthly basis.

(9 VAC 5-80-110, 40 CFR 60.755(c)(5) and Condition 28 of the NSR PSD permit dated 08/05/2014)

10. **Sampling Ports** - The permittee shall install a sampling port and thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead.

(9 VAC 5-80-110, 40 CFR 60.752(b)(2)(iv) and 40 CFR 60.756(a))

11. **Monitoring Devices** - The GCCS shall be equipped with a gas flow rate-measuring device that shall record the flow to the open flares (CF-2 through CF-6) at least every 15 minutes. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's specifications. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the GCCS is operating. Any periods of malfunction of these monitoring devices shall be recorded as defined in Condition III.C.7.

(9 VAC 5-80-110, 40 CFR 60.756(c) and Conditions 7 and 8 of the NSR PSD permit dated 08/05/2014)

12. **Flare Monitoring** - The permittee shall use a heat sensing device, such as an ultraviolet beam sensor or thermocouple, at each flare's pilot light or the flame itself to monitor and record the continuous presence of a flame when emissions are vented to the open flares. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's specifications. The methane concentration of the landfill gas feeding flares, CF-2 through CF-6, shall be monitored at least once every week when landfill gas is vented to any or all flares during the weekly timeframe. The monitoring may occur at the common header feeding the flares.

(9 VAC 5-80-110, 40 CFR 60.18, 40 CFR 60.752(b)(2)(iv), 40 CFR 60.756(c) and Conditions 28.c. and 29.b. of the NSR PSD permit dated 08/05/2014)

C. Recordkeeping

1. **Well Inspections** - The permittee shall record and maintain a log of well inspections that indicated a positive pressure had existed, including instances when positive pressure occurred in efforts to avoid fire, and any corrective action taken to meet the negative pressure requirement of Condition III.A.12 of this permit.

   (9 VAC 5-80-110, 40 CFR 60.753(b)(1) and Condition 34 of the NSR PSD permit dated 08/05/2014)

2. **Surface Monitoring Plan** – The permittee shall develop and maintain a surface monitoring design plan that includes a topographical map with the approved monitoring route indicated and the rationale for any approved site-specific deviations from the required intervals as allowed by 40 CFR 60.755(c)(1).

   (9 VAC 5-80-110, 40 CFR 60.753(d) and Condition 34 of the NSR PSD permit dated 08/05/2014)

3. **Design Capacity** – The permittee shall keep for at least five years, current, readily accessible, on site records of the design capacity report, the current amount of waste in place, and the year-by-year waste acceptance rates. Either paper copy or electronic formats, approved by DEQ, are acceptable.

   (9 VAC 5-80-110, 40 CFR 60.758(a) and Condition 34 of the NSR PSD permit dated 08/05/2014)

4. **Emission /Operating Data** - The permittee shall maintain records of emission and operational data as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. All records required by this condition shall be available for inspection by the DEQ and shall be current for the most recent five years. These records shall include, but are not limited to:

   a. All visual emissions observations and evaluations for the GCCS (i.e., flares) including the date and time of the observations, whether or not visible emissions were noted, the results of any Method 22 visible emissions determinations and any corrective action taken.

   b. The flare pilot flame or flare flame continuous monitoring in each flare stack for open flares, CF-2 through CF-6 when landfill gas is being vented to any or all flares.

   c. All periods of operations when landfill gas is being vented to each open flare, CF-2 through CF-6, during which the pilot flame or flare flame is absent for each open flare.

   d. The monthly monitored gauge pressure, temperature, and nitrogen or oxygen concentration for each well.

   e. The results from the monthly cover integrity monitoring and the date of cover repair.

   f. The monitored methane concentration at the landfill surface and the surface monitoring plan developed for the monitoring which includes a topographic map with the approved monitoring route indicated and the rationale for any approved site-specific deviations from the required intervals as allowed by 40 CFR 60.755(c)(1). Monitoring frequency shall be as described in 40 CFR 60.756(f).

g. The weekly monitored methane concentration of the landfill gas feeding flares, CF-2 through CF-6, during the weekly timeframe when landfill gas is being vented to any or all flares. The monitoring may occur at the common header feeding the flares.

h. The landfill gas flow, recorded at least once every 15 minutes for each open flare, CF-2 through CF-6 or recorded observations of the secured by-pass line valve.

i. The heat input for each open flare, CF-2 through CF-6, calculated on a quarterly basis using the lower heating value of methane (911 BTU/SCF), the quarterly highest monitored methane concentration recorded for item g and the corresponding gas flow during this quarterly highest monitored methane concentration.

j. All collection and control system exceedances of the operational standards, as provided in Condition III.A.12, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

k. All decommissioned wells.

l. Any inoperable periods exceeding one hour for the collection or control system.

m. The combined yearly throughput of landfill gas to the open flares, CF-2 through CF-6, calculated monthly as the sum of each consecutive 12-month period.

n. Emissions calculations for open flares, CF-2 through CF-6.

o. Date of first waste placement for Cells 1, 2, 2A, 3, 3A, 4, 4A, 5A, 5B, 6A, 6B, 7A, 7B, 7C, 8A, 8B, 9A, 9B, 10A, 10B, 10C, 11A, 11B, 11C, 12A, 12B, and 12C.

p. Calculations detailing the estimated annual site specific density and maximum design capacity.

q. Malfunction reports for control or collection devices.

r. A copy of the most recent approved gas collection and control system design plan.

(9 VAC 5-80-110, 40 CFR 60.758 and Condition 34 of NSR PSD permit dated 08/05/2014)

5. **Collection System** - The permittee shall keep for the life of the collection system:

a. An up to date, readily accessible plot map showing each existing and planned collector in the system. This map shall also provide a unique identification location label for each collector (as provided in 40 CFR 60.758).

b. Readily accessible records of the installation date and location of all newly installed collectors (as provided in 40 CFR 60.755).

c. Documentation that the landfill has no area excluded from the landfill gas estimation or landfill gas collection and control system due to the location of nondegradable refuse including asbestos, demolition refuse, and coal ash (as provided in 40 CFR 60.759).

(9 VAC 5-80-110, 40 CFR 60.755, 40 CFR 60.758(d), 40 CFR 60.759 and Condition 34 of the NSR PSD permit dated 08/05/2014)

6. **Control System** – The permittee shall keep, for the life of the control equipment, up-to-date, readily accessible records of the following information, as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of five years. Records of the control device vendor specifications shall be maintained until removal.

   a. The maximum expected gas generation flow rate as calculated in 40 CFR 60.755(a)(1).

   b. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 60.759(a)(1).

   c. The type of open flare (i.e. steam-assisted, air-assisted, or nonassisted) used, all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18.

   d. Continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

   (9 VAC 5-80-110, 40 CFR 60.758(b) and Condition 34 of the NSR PSD permit dated 08/05/2014)

7. **Malfunction** – The permittee shall maintain records of the occurrence and duration of any startup, shutdown (when the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emissions standards), or malfunction in the operation of the landfill gas collection and control system, any malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative. Keep records of SSM events as specified in Table 1 of 40 CFR 63, Subpart AAAA.

   (9 VAC 5-80-110, 40 CFR 63.1980 and 40 CFR 60.7(b))

8. **Training** - The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the combustion equipment. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept at the facility for a five-year period and made available for inspection by the DEQ.

   (9 VAC 5-80-110 and Condition 50 of the NSR PSD permit dated 08/05/2014)

9. **New Source Review Permit** -A copy of the most recent NSR permit shall be maintained on the premises of the facility to which it applies.

   (9 VAC 5-80-110 and Condition 54 of the NSR PSD permit dated 08/05/2014)

D. Testing/Compliance Provisions

1. **Initial Performance Test** - Initial performance tests shall be conducted to determine the net heating value of the gas being combusted and the actual exit velocity for each open flare, CF-4 through CF-6. The tests for each open flare, CF-4 through CF-6, shall be performed, and demonstrate compliance, within 60 days after achieving maximum production rate at which each flare will be operated but no later than 180 days after initial start-up of each flare. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and 9 VAC 5-60-30 of State Regulations. The test methods and procedures contained in 40 CFR 60.18(f)(3) and 40 CFR 60.18(f)(4) shall be used to determine the net heating value of the gas being combusted and the actual exit velocity for each open flare, CF-4 through CF-6. The details of the tests for each open flare are to be arranged with the Director, Piedmont Regional Office. The permittee shall submit a test protocol at least thirty days prior to testing for each open flare, CF-4 through CF-6. Two (2) copies of the test results for each open flare shall be submitted to the Director, Piedmont Regional Office within 45 days after test completion and 180 days after initial startup for each open flare. Each test report shall conform to the test report format enclosed with this permit and shall be submitted with the semi-annual compliance report specified in Condition III.E.1.

   (9 VAC 5-80-110 and Condition 24 of the NSR PSD permit dated 08/05/2014)

2. **Visible Emissions Evaluation** - Concurrently with the initial performance tests, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 22, shall also be conducted by the permittee on the open flares, CF-4 through CF-6. Each observation period shall be 2 hours. The details of the tests are to be arranged with Director, Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed within 60 days after achieving the maximum production rate at which each flare will be operated but no later than 180 days after initial start up of each flare, CF-4 through CF-6. Should conditions prevent observations, the Director, Piedmont Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. Two copies of the test result shall be submitted to the Director, Piedmont Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.

   (9 VAC 5-80-110 and Condition 26 of the NSR PSD permit dated 08/05/2014)

3. **Visible Emission Evaluation** - The permittee shall perform a weekly visual evaluation of the open flares, Monday through Friday, when operating, except when closed for holidays, for compliance with the opacity limit expressed in Condition III.A.24. If such periodic evaluations indicate any visible emissions, the permittee shall take appropriate action, immediately, to return the unit to normal operation such that no visible emissions exist. If such corrective action fails to eliminate visible emissions, the permittee shall conduct a visible emissions evaluation (VEE) utilizing EPA Method 22 (reference 40 CFR, Appendix A). If a Method 22 evaluation and/or corrective action becomes necessary, the permittee shall record the details of the incident in a logbook. The logbook shall be kept on site and available for inspection by the DEQ for the most recent five year period. If visible emission inspections conducted during twelve consecutive weeks show no visible emissions for a particular stack, the permittee may reduce the monitoring frequency to once per month for that stack. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per week for that stack.

   (9 VAC 5-80-110 and Condition 27 of the NSR PSD permit dated 08/05/2014)

4. **Gas Collection System** - The specified methods in paragraphs (a)(1) through (a)(6) of 40 CFR 60.755(a) shall be used to determine whether the gas collection system is in compliance with 40 CFR 60.752(b)(2)(ii) and operated as specified in 40 CFR 60.752(b)(2)(iv).

   (9 VAC 5-80-110, 40 CFR 60.655(a) and Condition 12 of the NSR PSD permit dated 08/05/2014)

5. **Determination of NMOC Concentration and LFG Flow Rate** - After the installation of a gas collection and control system in compliance with 40 CFR 60.755, the permittee shall determine the actual NMOC concentration and LFG flow rate and shall calculate the NMOC emission rate for the purposes of determining when the gas collection system can be removed in accordance with 40 CFR 60.754 (b).

   (9 VAC 5-80-110, 40 CFR 60.754(b) and Condition 25 of the NSR PSD permit dated 08/05/2014)

6. **Nitrogen Testing** – Unless oxygen is tested, the nitrogen level at each wellhead shall be determined by using Method 3C.

   (9 VAC 5-80-110, 40 CFR 60.753(c)(1) and Condition 5 of the NSR PSD permit dated 08/05/2014)

7. **Oxygen Testing** – Unless nitrogen is tested, the oxygen level at each wellhead shall be determined by an oxygen meter using Method 3A, except for the following:

   a. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span.

   b. A data recorder is not required.

   c. Only a zero and a span calibration gas are required. Ambient air may be used as span.

   d. A calibration error check is not required.

   e. The allowable sample bias, zero drift, and calibration drift are +/- 10%.

   (9 VAC 5-80-110, 40 CFR 60.753(c)(2) and Condition 5 of the NSR PSD permit dated 08/05/2014)

E. Reporting

1. **Semi-Annual Compliance Report -** A semi-annual compliance report shall be submitted to the Director, Piedmont Regional Office by the date specified below and shall contain the following:

   a. The initial performance test report for each open flare, CF-4 through CF-6, shall contain the following information:.

      (1) The type of flare.

      (2) All visible emission readings.

      (3) Heat content determination.

      (4) Gas flow rate or bypass measurements.

      (5) Exit velocity determinations.

   b. Instances when positive pressure at a wellhead occurred due to efforts to avoid a fire. If no such instances occur, the report shall so state.

   c. Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756 (a), (b), (c), and (d);

   d. Description and duration of all periods when each open flare, CF-2 through CF-6, was not working for a period exceeding 1 hour and length of time each open flare was not operating when landfill gas was being routed to any or all flares;

   e. Description and duration of all periods when landfill gas is diverted from each open flare, CF-2 through CF-6, through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756;

   f. All periods when the collection system was not operating in excess of 5 days;

   g. The location of each exceedance of the 500 ppm surface methane concentration, and the concentration recorded at each location for which an exceedance was recorded as provided in 40 CFR 60.755 (c); and as provided in Condition III.B.8 of this permit

   h. The date of installation and the location of each well or collection system expansion.

   Items (b) through (g) shall be submitted every six months. Semi-annual reports shall cover the calendar year (from January through June and July through December) and shall be submitted prior to September 30 (for January through June) and March 31 (for July through December). The initial performance tests for open flares, CF-4 through CF-6, should be submitted with the annual compliance report covering the time period when the initial performance tests were conducted.

One copy of the semi-annual compliance report shall be submitted to the U.S. Environmental Protection Agency at the address specified below:

Associate Director
Office of Air Enforcement (3AP10)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029
R3_APD_Permits@epa.gov

(9 VAC 5-80-110 and Condition 35 of the NSR PSD permit dated 08/05/2014)

2. **Initial Notification** - The permittee shall furnish written notification to the Director, Piedmont Regional Office of:

   a. The actual date on which construction for Cells 2A, 3A, 4A, 5A, 5B, 6B, 7A, 7B, 7C, 8A, 8B, 9A, 9B, 10A, 10B, 10C, 11A, 11B, 11C, 12A, 12B, and 12C, individually, and the open flares CF-4, CF-5, and CF-6 at Atlantic Waste Disposal Landfill commenced within 30 days after such date.

   b. The anticipated first waste placement date for Cells 2A, 3A, 4A, 5A, 5B, 6B, 7A, 7B, 7C, 8A, 8B, 9A, 9B, 10A, 10B, 10C, 11A, 11B, 11C, 12A, 12B, and 12C, individually, and the anticipated start-up date for open flares CF-4, CF-5, and CF-6, postmarked not more than 60 days nor less than 30 days prior to such date.
   c. The actual first waste placement date for Cells 2A, 3A, 4A, 5A, 5B, 6B, 7A, 7B, 7C, 8A, 8B, 9A, 9B, 10A, 10B, 10C, 11A, 11B, 11C, 12A, 12B, and 12C, individually, and the actual start-up date for open flares CF-4, CF-5, and CF-6 , within 15 days after such date.

   d. The anticipated date of performance tests required by Conditions III.D.1 and III.D.2 for each open flare, CF-4, CF-5 and CF-6, at least 30 days prior to such date.

   e. Any changes to the most recently approved gas collection and control system design plan at least 90 days prior to the date of the proposed change. Examples of relevant changes include, but are not limited to installing control devices other than open flares CF-4, CF-5 and CF-6; changes in the treatment system that processes the collected gas for subsequent sale or use; or installation of blowers other than those attached to open flares CF-4, CF-5 and CF-6.

   Copies of the written notifications referenced in items a through d above are to be sent to the US Environmental Protection Agency at the address stated in Condition III.E.1 above.

   (9 VAC 5-80-110, 40 CFR 60.7(a) and Condition 40 of the NSR PSD permit dated 08/05/2014)

3. **Annual Emission Report for Fee Calculation** - The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the department.

   (9 VAC 5-80-110 and Condition 38 of the NSR PSD permit dated 8/20/2005)

4. **Requirements for Landfill Closure** - The permittee shall submit the closure report to DEQ and the Administrator within 30 days of waste acceptance cessation.

   a. The equipment removal report shall contain all of the following items:

      (i) A copy of the closure report submitted in accordance with 40 CFR 60.757 (d);

      (ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and

      (iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

   b. The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(v) below have been met.

   The collection and control system may be capped or removed provided that all the conditions of paragraphs 40 CFR 60.752(b)(2)(v) (A), (B), and (C) are met:

   c. The landfill shall be a closed landfill as defined in 40 CFR 60.751. A closure report shall be submitted to the Administrator as provided in 40 CFR 60.757(d);

   d. The collection and control system shall have been in operation a minimum of 15 years; and

   e. Following the procedures specified in 40 CFR 60.754(b), the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

   DEQ may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 9 VAC 20-80-250 E & F and 40 CFR 258.60. If a closure report has been submitted to the DEQ, no additional wastes may be placed into the landfill without filing a notification of modification.

   (9 VAC 5-80-110, 60.752(b)(2)(v), 40 CFR 60.757(d - e) and Condition 36 of the NSR PSD permit dated 08/05/2014)

IV. Facility Wide Conditions - Landfill Surface/Roads/Support Activities – (emission unit ID # CP-1, CP-2, P-1, P-2, S-1 to S-4, C-1, C-2 and Gasoline Dispensing Facility with T-10)

A. Limitations

1. **Fugitive Dust Emissions** - Unless otherwise specified, dust emission controls shall include the following or equivalent as a minimum:

   a. Dust from grading, cell construction, waste compaction, application of daily cover, wood waste chipping operations, storage piles and traffic areas shall be controlled by we suppression or equivalent (as approved by DEQ) control measures.

   b. All material being stockpiled shall be kept moist to control dust during storage and handling or covered to minimize emissions.

   c. Dust from haul roads shall be controlled by wet suppression and prompt removal of dried sediment resulting from soil erosion and dirt spilled or tracked onto paved surfaces within the landfill.

   d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

   (9 VAC 5-80-110 and Condition 11 of the NSR PSD permit dated 08/05/2014)

2. **Landfill Container Painting System Fugitive Emission Controls: Cleaning – Limitations** - Volatile organic compound (VOC) emissions from cleaning or purging operations shall be minimized by the use of detergents or use of high pressure water or use of non-volatile compounds or reduced use of VOCs or adjustment of production schedules to minimize coating changes. VOCs shall not be intentionally spilled, discarded to sewers, stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.

   (9 VAC 5-80-110 and Condition 4 of the NSR permit dated 9/08/2011)

3. **Landfill Container Painting System Fugitive Emission Controls: Painting – Limitations** - To minimize visible emissions and fugitive emissions, the permittee shall:

   a. Minimize or, if necessary, terminate outdoor painting operations if the prevailing wind direction and speed causes particulate matter from such activities to be transported to adjacent property.

   b. Terminate outdoor painting operations if the wind speed exceeds a sustained 25 miles per hour at the facility, unless effective containment methods preapproved by DEQ are utilized.

   c. Use containment methods such as curtains, tarps or shrouds where possible and practical, and locate the operations to minimize particulate matter from being transported to adjacent property.

d. Use HVLP spray equipment and spray in a horizontal to down pattern to the maximum extent possible and practicable.

(9 VAC 5-80-110 and Condition 5 of the NSR permit dated 9/08/2011)

4. **Landfill Fly Ash Processing Facility Fugitive Emission Controls: Material Handling – Limitations –** Fugitive dust and Fugitive emission controls for the Fly Ash Processing Facility shall include the following, or equivalent, as approved by DEQ:

   a. Use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, grading of roads, or clearing of land.

   b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; paving of roadways, and maintenance of roadways in a clean condition.

   c. Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials.

   d. Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all times when in motion.

   e. Prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

   f. Dust from material handling, Fly Ash handling and load-outs, shall be controlled by wet suppression or equivalent as needed. The wet suppression spray systems shall be operated at optimum design.

   g. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Trucks leaving the site shall have clean wheels achieved by use of a wheel washer or equivalent. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

   (9 VAC 5-80-110 and Condition 3 of the NSR permit dated 5/13/2010)

5. **Notification for Control Equipment Maintenance** - In case of shutdown or bypassing, or both, of air pollution control equipment for necessary scheduled maintenance which results in excess emissions for more than one hour, the intent to shut down such equipment shall be reported to the board and local air pollution control agency, if any, at least 24 hours prior to the planned shutdown. Such prior notice shall include, but is not limited to, the following:

   a. Identification of the specific facility to be taken out of service as well as its location and permit or registration number;

   b. The expected length of time that the air pollution control equipment will be out of service;

   c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period; and,

d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage of the air pollution control equipment.

(9 VAC 5-80-110 and Condition 41 of the NSR PSD permit dated 08/05/2014)

6. **Landfill Container Painting System – (emission unit ID # CP-1, CP-2) – Limitations** - Particulate emissions from each of the container surface coating operation spray guns (Unit Ref. Nos. CP-1 and CP-2) and paint scraping operation shall be controlled by curtains, tarps or shrouds. Each curtain, tarp or shroud system shall be in operation when the spraying or scraping process is in operation.

(9 VAC 5-80-110 and Condition 2 of the NSR permit dated 9/08/2011)

7. **Landfill Container Painting System – (emission unit ID # CP-1, CP-2) – Limitations** - Volatile Organic Compound (VOC) emissions from each of the container surface coating operation spray guns (Unit Ref. Nos. CP-1 and CP-2) shall be controlled by an increased transfer efficiency of 73% as determined by methods that have been approved by DEQ. Transfer efficiency is defined as the ratio of the gallons of solids deposited on the product to the gallons of solids in the coating as applied.

(9 VAC 5-80-110 and Condition 3 of the NSR permit dated 9/08/2011)

8. **Landfill Container Painting System – (emission unit ID # CP-1, CP-2) – Limitations** - Volatile Organic Compound (VOC) content in all coating mixtures is limited to 2.0 lbs per gallon of coating as delivered to a coating application system. If any one coating mixture does exceed the VOC limit of 2.0 lbs VOC per gallon, then the daily volume-weighted average for that coating type shall not exceed 2.0 lbs VOC per gallon.

(9 VAC 5-80-110 and Condition 6 of the NSR permit dated 9/08/2011)

9. **Landfill Container Painting System -VOC Work Practice Standards – Limitations** - At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution practices for minimizing emissions.

(9 VAC 5-80-110 and Condition 7 of the NSR permit dated 9/08/2011)

10. **Landfill Container Painting System – (emission unit ID # CP-1, CP-2) – Limitations** - The throughput of coatings (as applied) for all activities, including the container surface coating operation spray guns (Unit Ref. Nos. CP-1 and CP-2) combined shall not exceed 9,800 gallons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-80-110 and Condition 8 of the NSR permit dated 9/08/2011)

11. **Landfill Container Painting System – (emission unit ID # CP-1, CP-2) – Limitations –** Emissions from the container surface coating operation spray guns (Unit Ref. Nos. CP-1 and CP-2) shall not exceed the limits specified below:

Particulate Matter (PM)	1.9 lbs/hr	4.8 tons/yr	(9 VAC 5-50-260)
PM-10	1.9 lbs/hr	4.8 tons/yr	(9 VAC 5-50-260)
PM-2.5	1.9 lbs/hr	4.8 tons/yr	(9 VAC 5-50-260)
Volatile Organic Compounds	4.0 lbs/hr	9.8 tons/yr	(9 VAC 5-50-260)
Hazardous Air Pollutants (HAPs as VOCs)			
Any single HAP		0.46 tons/yr	(9 VAC 5-50-260)
All HAPs, combined		0.46 tons/yr	(9 VAC 5-50-260)

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers IV.A.6, IV.A.8, and IV.C.1.

(9 VAC 5-80-110 and Condition 9 of the NSR permit dated 9/08/2011)

12. **Landfill Container Painting System – (emission unit ID # CP-1, CP-2) – Limitations -** As of the date of this permit, the permittee is limited to use of the following volatile hazardous air pollutants (HAPs) in coatings, thinners and solvents for the container surface coating operation spray processes (Unit Ref. Nos. CP-1 and CP-2):

Volatile HAPs	CAS Number
glycol ether (other)	None assigned

The permittee may use additional HAPs (listed in Attachment A) in the spray coating process under 9 VAC 5 Chapter 60 Article 5 without obtaining a new permit provided the following conditions are met:

a. Notification shall be given to the Piedmont Regional Office. Such notification shall be made within fifteen (15) days after the use of additional HAPs and shall include identification of the HAP, the date the HAP was first used, and the anticipated maximum throughput of that compound in lbs/hr and tons/yr. Additional details of the notification should be arranged with the Piedmont Regional Office.

b. The permittee shall operate this facility in compliance with 9 VAC 5 Chapter 60, Article 5, for all HAPs.

c. The permittee shall not use any HAP which would make the facility subject to federal emission standards in 40 CFR 61 or 40 CFR 63.

d. If a permit is required, failure to obtain the permit prior to the change in process formulation or the use of any additional HAP may result in enforcement action.

(9 VAC 5-80-110 and Condition 10 of the NSR permit dated 9/08/2011)

13. **Landfill Container Painting System (HAP) – Limitations** - Hazardous air pollutant (HAP) emissions (non-carcinogenic, less than 1.0%), as defined by §112(b) of the Clean Air Act, from the container surface coating operation shall not exceed 0.46 tons per year of any individual HAP or 0.46 tons per year of any combination, calculated monthly as the sum of each consecutive 12-month period. HAPs (carcinogenic, less than 0.1%) which are not accompanied by a specific CAS number (as listed in Attachment A) shall be calculated as the sum of all compounds containing the named chemical when determining compliance with the individual HAP emissions limitation of 0.046 tons per year to maintain the non-HAP coating status.

    (9 VAC 5-80-110 and Condition 11 of the NSR permit dated 9/08/2011)

14. **Landfill Container Painting System(Opacity) – Limitations** - Container surface coating operations shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A) or an alternative as approved by DEQ. Compliance with Condition 5 of this permit will indicate compliance with this condition.

    (9 VAC 5-80-110 and Condition 12 of the NSR permit dated 9/08/2011)

15. **Landfill Fly Ash Processing Facility requirements (emission unit ID # P-1, P-2, S-1 to S-4, C-1, C-2) – Limitations** – Particulate emissions shall be controlled as follows:

Emission source	Control
Silo(s)	Bin Vent Filter.
Pug Mills	Saturated with water.
Truck Load-Out	The use of the following as needed: A curtain around the pug mill discharge to the top of the dump truck, wet suppression or equivalent.

    The controls listed in the table above shall be provided with adequate access for inspection and maintenance and shall be properly functioning when the process is in operation. The chute and enclosure(s) shall be maintained in good condition without tears or holes.

    (9 VAC 5-80-110 and Condition 2 of the NSR permit dated 5/13/2010)

16. **Landfill Fly Ash Processing Facility requirements (emission unit ID # P-1, P-2, S-1 to S-4, C-1, C-2 – Limitations –** Total emissions from the wet Fly Ash processing facility type shall not exceed the limits specified below:

Total combined:				
PM	1.4	Lb/hr	5.5	tons/yr
PM-10	0.6	Lb/hr	2.6	tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions IV.A.10, IV.A.11 and IV.A.13.

(9 VAC 5-80-110 and Condition 6 of the NSR permit dated 5/13/2010)

17. **Landfill Fly Ash Processing Facility requirements (emission unit ID # S-1 to S-4) – Limitations –** Visible emissions from each fabric filter exhaust stack(s) shall not exceed five percent (5%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).

(9 VAC 5-80-110 and Condition 7 of the NSR permit dated 5/13/2010)

18. **Facility Gasoline Dispensing requirements - (emission unit ID # T-10) – Limitations –** Except where this permit is more restrictive than the applicable requirement, the MACT equipment as described in Condition II shall be operated in compliance with the requirements of 40 CFR 63, Subpart CCCCCC (when storing gasoline). The facility shall, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. The facility shall keep applicable records as specified in §63.11125(d) and §63.11126(b). Based on the monthly throughput of gasoline at the landfill facility (less than 10,000 gallons/month), the following recordkeeping and work practice standards listed in 40 CFR 63.11116 apply to the facility:

a. The facility must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures include, but are not limited to, the following:

   (1) Minimize gasoline spills;

   (2) Clean up spills as expeditiously as practicable;

   (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

   (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

b. The facility is not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

c. The facility must comply with the requirements of this subpart by the applicable dates specified in §63.11113 (January 24, 2014).

d. Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

The gasoline throughput records and applicable records as specified in §63.11125(d) and §63.11126(b) shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110, §63.11113, §63.11116 and §63.11126)

B. Monitoring

1. **Landfill Fly Ash Processing Facility requirements (emission unit ID # S-1 to S-4) – Monitoring –** All silo bin vent filters shall be observed visually once per week, when in operation, to determine if there are any visible emissions. This visually observation shall be performed during the uploading process for at least a brief time period during normal operations. The presence of visible emissions shall indicate the need for prompt corrective action. The permittee shall keep a log of the observations. The log shall include the name of the observer, the date and time of the observations, the presence of visible emissions or lack thereof, and the date and time of corrective actions taken whenever visible emissions were observed.

(9 VAC 5-80-110 and Condition 4 of the NSR permit dated 5/13/2010)

C. Recordkeeping

1. **Landfill Container Painting System requirements – (emission unit ID # CP-1 and CP-2) – Recordkeeping -** The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

a. Annual throughput of coatings (in gallons/year) used in the spray guns (Unit Ref. Nos. CP-1 and CP-2), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

b. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS), or other vendor information as approved by DEQ showing VOC content (in lbs/gallon), and HAP content (in % by weight) for each coating, thinner and solvent used.

c. Log of the total coatings used in the spray guns (Unit Ref. Nos. CP-1 and CP-2) including date, identification, VOC content in lbs/gallon as applied, and as necessary, daily volume weighted average VOC content (in lbs VOC/gallon as applied).

d. Log wind speed and wind direction every thirty (30) minutes when outdoor coating/painting operations occur. Monitoring shall commence when outdoor coating/painting operations begin, and shall continue until outdoor coating/painting operations are terminated.

e. Annual emissions (in tons/year) of VOC, each HAP and all HAPs used in spray coatings and thinners/solvents, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

f. Scheduled and unscheduled maintenance and operator training.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and Condition 13 of the NSR permit dated 9/08/2011)

2. **Landfill Fly Ash Processing Facility requirements (emission unit ID # P-1, P-2, S-1 to S-4, C-1, and C-2) – Recordkeeping** – The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

a. Annual throughput of Fly Ash in tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

b. Records as required in Condition IV.B.1.

c. Record of scheduled and non-scheduled maintenance.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and Condition 8 of the NSR permit dated 5/13/2010)

D. Testing/Compliance

None.

E. Reporting

1. **Landfill Container Painting System requirements – Reporting** – The permittee shall furnish written notification to the Piedmont Regional Office of:

a. The actual date on which Construction of the container painting facility commenced within 30 days after such date.

b. The anticipated start-up date of the container painting facility postmarked not more than 60 days nor less than 30 days prior to such date.

c. The actual start-up date of the container painting facility within 15 days after such date.

(9 VAC 5-80-110 and Condition 14 of the NSR permit dated 9/08/2011)

2. **Landfill Fly Ash Processing Facility requirements (P-1, P-2, S-1 to S-4, C-1, C-2) – Reporting** – The permittee shall furnish written notification to the Piedmont Region of:

a. The actual date on which construction of the fly ash processing facility commenced within 30 days after such date.

b. The actual start-up date of the fly ash processing facility within 15 days after such date.

(9 VAC 5-80-110 and Condition 9 of the NSR permit dated 5/13/2010)

V. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation (9 VAC_)	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
T1	Leachate Storage Tank	5-80-720B	VOC	110,000 gallons
T2	Leachate Storage Tank	5-80-720B	VOC	500,000 gallons
T3	Leachate Storage Tank	5-80-720B	VOC	500,000 gallons
T4	Leachate Storage Tank	5-80-720B	VOC	500,000 gallons
T-5	Diesel Tank (Off-road diesel fuel)	5-80-720A	VOC	10,000 gallons
T-6	Used Oil Tank	5-80-720C	VOC	300 gallons
T-7	Used Oil Tank	5-80-720C	VOC	300 gallons
T-8	Removed			
T-9	Diesel Fuel Tank	5-80-720A	VOC	12,000 gallons
T-11	Diesel Storage Tank (On-road diesel fuel)	5-80-720A	VOC	2,000 gallons
T-12 to T17	Lube Oil Truck (Off-road diesel fuel) (Lube Oil) (Hydraulic Oil) (Used Oil) (Transmission Oil) (Lube Oil)	5-80-720A	VOC	 2,000 gallons 200 gallons 200 gallons 150 gallons 100 gallons 100 gallons
T-18	Hydraulic Oil Tank	5-80-720C	VOC	300 gallons
T-19	Lube Oil Tank	5-80-720C	VOC	300 gallons

Emission Unit No.	Emission Unit Description	Citation (9 VAC_)	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
T-20	Lube Oil Tank	5-80-720C	VOC	500 gallons
T-21	Hydraulic Oil Tank	5-80-720C	VOC	500 gallons
T-22	Transmission Oil Tank	5-80-720C	VOC	500 gallons
T-23	Transmission Oil Tank	5-80-720C	VOC	280 gallons
T-24	Transmission Oil Tank	5-80-720C	VOC	280 gallons
T-25	Transmission Oil Tank	5-80-720C	VOC	280 gallons
T-26	Transmission Oil Tank	5-80-720C	VOC	280 gallons
T-27	Leachate Storage Tank	5-80-720B	VOC	16,800 gallons
T-28	Leachate Storage Tank	5-80-720B	VOC	16,800 gallons
T-29	Leachate Storage Tank	5-80-720B	VOC	16,800 gallons
T-30	Leachate Storage Tank	5-80-720B	VOC	16,800 gallons
T-31	Leachate Storage Tank	5-80-720B	VOC	16,800 gallons
T-32	Leachate Storage Tank	5-80-720B	VOC	16,800 gallons
T-33	Leachate Storage Tank	5-80-720B	VOC	16,800 gallons
T-34	Leachate Storage Tank	5-80-720B	VOC	16,800 gallons
W-1	Welder – Trailer Mounted	5-80-720A	PM	NA
W-2	Welder - Gas (on service truck)	5-80-720A	PM	NA
SILO-1	Silo for Posi-Shell alternative cover (Portland Cement)	5-80-720B	PM	NA
PROP-1	Propane Tank	5-80-720B	VOC	1,000 gallons
PROP-2	Propane Tank	5-80-720B	VOC	500 gallons
EME	Misc. earth-moving eqpt.	5-80-720A	CO, PM10, NOx, SO2, VOC	Varies
LP1-LP6	Magnum (6 total) Diesel Engines	5-80-720C*	CO, PM10, NOx, SO2, VOC	6 kW each, 12.2 HP each
HEAT-1	Water heater for Truck Wash (Propane)	5-80-720C	CO, PM10, NOx, SO2, VOC	320,000 Btu/hr
HEAT-3	Modine Old Shop Heater (Propane)	5-80-720C	CO, PM10, NOx, SO2, VOC	200,000 Btu/hr
HEAT-4	Modine Old Shop Heater (Propane)	5-80-720C	CO, PM10, NOx, SO2, VOC	200,000 Btu/hr
HEAT-5	Robert Gordon, Shop Heater (Propane)	5-80-720C	CO, PM10, NOx, SO2, VOC	125,000 Btu/hr

Emission Unit No.	Emission Unit Description	Citation (9 VAC_)	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
PGEN-2	Sycamore Generator on Service Truck (Gasoline)	5-80-720C*	CO, PM10, NOx, SO2, VOC	7 kW, 10.0 HP
PGEN-3	Cummings Engine Portable Emergency Diesel Generator	5-80-720C*	CO, PM10, NOx, SO2, VOC	170.0 HP
PGEN-4	Generac Generator Portable Emergency Gasoline Generator	5-80-720C*	CO, PM10, NOx, SO2, VOC	5.5 HP
PUMP-1	One 6 inch water pump at Truck Wash - diesel	5-80-720C*	CO, PM10, NOx, SO2, VOC	65.0 HP
PUMP-6	One 4 inch water pump Godwin Trash Pump (Honda Gas Engine)	5-80-720C*	CO, PM10, NOx, SO2, VOC	8.0 HP
ATV-1	ATV	5-80-720C*	CO, PM10, NOx, SO2, VOC	20.0 HP
AIR-1	Portable Air Compressor Ingersoll Rand	5-80-720C*	CO, PM10, NOx, SO2, VOC	12.5 HP
AIR-2	Portable Air Compressor Kohler Command	5-80-720C*	CO, PM10, NOx, SO2, VOC	5.5 HP
AIR-3	Trailer Mounted Sullair Air Compressor Diesel Engine	5-80-720C*	CO, PM10, NOx, SO2, VOC	49.0 HP
PW-1	Portable Pressure Washer – Gas Engine/Diesel Heater	5-80-720C*	CO, PM10, NOx, SO2, VOC	18.0 HP
SK-1	Safety-Kleen Aqueous Parts Washer (Model 91)	5-80-720B	VOC	40 gallons

* See Section VII - Future Applicable Requirements.

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VI. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
9 VAC 5-40-5800 and 40 CFR 60 subpart Cc	Emission Standards and Emission Guidelines for Sanitary Landfills	These regulations only apply to municipal solid waste landfills which commenced construction, reconstruction or modification before May 30 1991.
40 CFR 64	Compliance Assurance Monitoring	Generally, the requirements of Compliance Assurance Monitoring (CAM) for landfills do not apply because 40 CFR 64.2(b) "Exemptions—(1) Exempt emission limitations or standards. The requirements of this part shall not apply to any of the following emission limitations or standards: (i) Emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act." Since the landfill facility is subject to the requirements of NSPS Subpart WWW and MACT AAAA, CAM does not apply.
40 CFR 75	Acid Rain Regulations	This landfill does not have a "Qualifying Facility."
40 CFR Parts 51,52,70 and 71	Title V Greenhouse Gas Tailoring Rule,	Title V Greenhouse Gas Tailoring Rule, 40 CFR Parts 51, 52, 70 and 71, does not apply to the facility as it is an existing PSD source not currently subject to PSD modification for any pollutant.
9 VAC 5-40-20 A.4	Startup, shut down, and malfunction opacity exclusion	The startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-40-20 A.4 cannot be included in any Title V permit. This portion of the regulation is not part of the federally approved state implementation plan. The opacity standard applies to existing sources at all times including startup, shutdown, and malfunction. Opacity exceedances during malfunction can be affirmatively defended provided all requirements of the affirmative defense section of this permit are met. Opacity exceedances during startup and shut down will be reviewed with enforcement discretion using the requirements of 9 VAC 5-40-20 E, which state that "At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions."

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

VII. Future Applicable Requirements

Future modification (or new installation) of existing stationary compression ignition (CI) internal combustion engine (ICE) may result in the applicability of 40 CFR 60, NSPS Subpart IIII (Section 60.4200(a)(3) or new requirements for 40 CFR 63. MACT Subpart ZZZZ.

VIII. General Conditions

1. **General Conditions - Federal Enforceability** -All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

   (9 VAC 5-80-110 N)

2. **General Conditions - Permit Expiration**- This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

   (9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

3. **General Conditions - Permit Expiration**-The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

   (9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

4. **General Conditions - Permit Expiration**-If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.

   (9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

5. **General Conditions - Permit Expiration**-No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.

   (9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

6. **General Conditions - Permit Expiration**-If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

7. **General Conditions - Permit Expiration**-The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

8. **General Conditions -Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

   a. The date, place as defined in the permit, and time of sampling or measurements.

   b. The date(s) analyses were performed.

   c. The company or entity that performed the analyses.

   d. The analytical techniques or methods used.

   e. The results of such analyses.

   f. The operating conditions existing at the time of sampling or measurement.

   (9 VAC 5-80-110 F)

9. **General Conditions -Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

   (9 VAC 5-80-110 F)

10. **General Conditions -Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:

(1) Exceedance of emissions limitations or operational restrictions;

(2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,

(3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

11. **General Conditions - Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

a. The time period included in the certification. The time period to be addressed is January 1 to December 31.

b. The identification of each term or condition of the permit that is the basis of the certification.

c. The compliance status.

d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

f. Such other facts as the permit may require to determine the compliance status of the source.

g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov

(9 VAC 5-80-110 K.5)

12. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Director, Piedmont Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 43 of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

13. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Piedmont Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Regional Office.

(9 VAC 5-20-180 C)

14. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

15. **General Conditions - Duty to Comply -** The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

16. **General Conditions - Need to Halt or Reduce Activity not a Defense -**It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

17. **General Conditions - Permit Modification -**A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

18. **General Conditions - Property Rights -** The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-110 G.5)

19. **General Conditions - Duty to Submit Information -** The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

(9 VAC 5-80-110 G.6)

20. **General Conditions - Duty to Submit Information -** Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

(9 VAC 5-80-110 K.1)

21. **General Conditions - Duty to Pay Permit Fees -** The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9 VAC 5-80-2310 through 9 VAC 5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9 VAC 5-80-2340, adjusted annually by the change in the Consumer Price Index.

(9 VAC 5-80-110 H, 9 VAC 5-80-340 C and 9 VAC 5-80-2340 B)

22. **General Conditions - Fugitive Dust Emission Standards -** During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;

d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-90)

23. **General Conditions - Startup, Shutdown, and Malfunction -** At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E)

24. **General Conditions - Alternative Operating Scenarios -** Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

25. **General Conditions - Inspection and Entry Requirements -** The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

d. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

26. **General Conditions - Reopening For Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:

a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

27. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

28. **General Conditions - Transfer of Permits** - No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.

(9 VAC 5-80-160)

29. **General Conditions - Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-160)

30. **General Conditions - Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-160)

31. **General Conditions - Malfunction as an Affirmative Defense -** A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of the following condition are met.

(9 VAC 5-80-250)

32. **General Conditions - Malfunction as an Affirmative Defense -** The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

b. The permitted facility was at the time being properly operated.

c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

(9 VAC 5-80-250)

33. **General Conditions - Malfunction as an Affirmative Defense -** In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

(9 VAC 5-80-250)

34. **General Conditions - Malfunction as an Affirmative Defense -** The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

35. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

36. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

37. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

38. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

39. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

40. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

41. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.

b. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

IX. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

1. 9 VAC 5 Chapter 50, Part II, Article 2: Standards of Performance for Odorous Emissions

2. 9 VAC Chapter 50, Part II, Article 3: Standards of Performance for Toxic Pollutants

(9 VAC 5-80-110 N and 9 VAC 5-80-300)

1. **Odor Management Plan:** Within 90 days of the issuance of this [NSR PSD] permit [dated August 5, 2014.], the permittee shall submit for DEQ approval a plan that describes the practices and technology that will be used to minimize off-site odors and to address odor complaints that may occur. The plan shall incorporate the use of best available odor control technology that is appropriate for this landfill. The plan shall also describe procedures that will be implemented in response to citizen odor complaints or the detection of significant off-site odors by DEQ staff, including progressive steps that will be taken to reduce odors. A log of all odor complaints received and actions taken shall be kept and made available for inspection by authorized Federal, State or Local officials. A copy of the log entries for each semi-annual period (January-June and July-December) shall be sent to the Director, Piedmont Regional Office, within 10 days of the close of that semi-annual period. The Odor Management Plan shall be reviewed annually by the permittee and evaluated for the need and feasibility of new or modified odor control technology or practices. The results of this review and a modified plan (if applicable) shall be submitted to the Director, DEQ Piedmont Regional Office, by November 1st of each year.

(9 VAC 5-50-410, 9 VAC 5-50-260 and Condition 43 of the NSR PSD Permit dated 08/05/2014)

To: Air Compliance Manager
Department of Environmental Quality – Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

From: *(Facility Name)* Reg. No. _____

Re: PROMPT DEVIATION REPORT – Pursuant to Title V Permit

Date:

This confirms the deviation reported to the Regional Office at _____ o'clock on ____/____/_____.
The details are described below. The deviation may have caused excess emissions for more than one hour, consistent with specified averaging times. None of these deviations were related to a malfunction.

Start date & time:	End date & time:	Estimated Duration:

Deviation from which permit condition (*condition number and brief description*):
Description of incident (*including emission unit affected*):
Description of Monitoring Requirement for affected unit(s):
Probable cause:
Description of corrective measures taken (*demonstrating a timely & appropriate response*):
Description of preventive measures taken:

Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who mange the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ _____

(Signature) *(Name & Title)*

To: Air Compliance Manager
Department of Environmental Quality – Piedmont Regional Office
4949-A Cox Road, Glen Allen, VA 23060
From: *(Facility Name)* Reg. No. _____
Re: SEMI-ANNUAL MONITORING REPORT – Pursuant to Title V Permit
Date:

The following monitoring report is submitted as required by our Title V permit. For the purposes of this report, deviation means (1) exceedances of emission limits, as determined by such means as stack testing, continuous emission monitors, parametric monitoring and EPA Method 9 visible emission evaluations; (2) excursions from control device operating parameter requirements such as afterburner temperature, scrubber flow rate, baghouse pressure drop; (3) excursions from operational restrictions things such as throughput, fuel quality, and coating VOC and HAP content; and (4) failure to meet monitoring, record keeping or reporting requirements. The report addresses all data points, which are above a standard, limit etc, according to the averaging period, if any, specified in the permit. If no averaging period is specified in the permit, then any monitored reading is considered a deviation to be reported. Deviations are reported regardless of whether they may have caused excess emissions or whether they were the result of a malfunction.

The period covered by the report is from ____/____/_____ to ____/____/_____.
During the reporting period:

- ☐ No deviations from permit requirements occurred during this semi-annual reporting period. (We conducted all required monitoring and associated record keeping and reporting. Required monitoring revealed no deviations from permit requirements.)
- ☐ We failed to conduct required monitoring/record keeping/reporting as explained on the attached form.
- ☐ We identified deviations as a result of required monitoring:
- ☐ Deviations were addressed in CEM Excess Emission Report(s) dated: _____
- ☐ Deviations were addressed in Fuel Report(s) dated: _____
- ☐ Deviations were addressed in MACT Report(s) dated: _____
- ☐ Deviations due to malfunctions were addressed in letters dated: _____
- ☐ Deviations were addressed in other report(s) dated: _____
  Type of report:_____
- ☐ Deviations were previously described in Prompt Deviation Reports dated:

  _____ _____ _____ _____ _____
  _____ _____ _____ _____ _____

- ☐ "Other" deviations, which were not previously reported, are described in the attachment.

Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who mange the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ _____
(Signature) *(Name & Title)*

FAILURE TO MONITOR, KEEP RECORDS OR REPORT Registration No. _____ Page _____ of _____
Submitted as Part of Semi-Annual Monitoring Report

Permit Condition No. & DESCRIPTION OF REQUIREMENT	DESCRIPTION OF DEVIATION (including date)	REASON FOR DEVIATION & CORRECTIVE ACTION

Annual Compliance Certification Registration No. ____________ Page _____ of _____

Cond. No.	TERMS & CONDITIONS CONTAINED IN THE PERMIT *(list in order)*	MEANS OF DETERMINING COMPLIANCE STATUS	TYPE OF DATA THE MEANS PROVIDES	PERIODS OF NON-COMPLIANCE
			☐ Continuous ☐ Intermittent	☐ Yes ☐ No
			☐ Continuous ☐ Intermittent	☐ Yes ☐ No
			☐ Continuous ☐ Intermittent	☐ Yes ☐ No
			☐ Continuous ☐ Intermittent	☐ Yes ☐ No
			☐ Continuous ☐ Intermittent	☐ Yes ☐ No
			☐ Continuous ☐ Intermittent	☐ Yes ☐ No
			☐ Continuous ☐ Intermittent	☐ Yes ☐ No
			☐ Continuous ☐ Intermittent	☐ Yes ☐ No

Form approved for use 9/18/00

Annual Compliance Certification

Registration No. _____

"OTHER" DEVIATIONS
Submitted as Part of Semi-Annual Monitoring Report

Registration No. _____

Condition No. & Description of Requirement	**Description of Deviation** (time, emission unit, description of event, cause)	**Description of Associated Monitoring Requirement**	**Description of corrective measures taken (*demonstrating a timely & appropriate response*)**

(Report deviations which may have caused excess emissions for more than one hour on a deviation report form, not here.)

Attachment A

DEPARTMENT OF ENVIRONMENTAL QUALITY
HAZARDOUS AIR POLLUTANT LIST PAGE 1 OF 2

CAS#	NAME
75-07-0	ACETALDEHYDE
60-35-5	ACETAMIDE
75-05-8	ACETONITRILE
98-86-2	ACETOPHENONE
53-96-3	2-ACETYLAMINOFLUORENE
107-02-8	ACROLEIN
79-06-1	ACRYLAMIDE
79-10-7	ACRYLIC ACID
107-13-1	ACRYLONITRILE
107-05-1	ALLYL CHLORIDE
92-67-1	4-AMINODIPHENYL
62-53-3	ANILINE & HOMOLOGUES
90-04-0	o-ANISIDINE
----------	ANTIMONY COMPOUNDS[1]
----------	ARSENIC COMPOUNDS
71-43-2	BENZENE (including benzene from gasoline)
92-87-5	BENZIDINE
98-07-7	BENZOTRICHLORIDE
100-44-7	BENZYL CHLORIDE
----------	BERYLLIUM COMPOUNDS
92-52-4	BIPHENYL
72-55-9	2,2-BIS(p-CHLORPHENYL)-1,1-DICHLORO-ETHYLENE/DDE
75-25-2	BROMOFORM
106-99-0	1,3-BUTADIENE
111-76-2	BUTOXYETHANOL [3]
----------	CADMIUM COMPOUNDS
156-62-7	CALCIUM CYANAMIDE
133-06-2	CAPTAN
63-25-2	CARBARYL
75-15-0	CARBON DISULFIDE
56-23-5	CARBON TETRACHLORIDE
463-58-1	CARBONYL SULFIDE
120-80-9	CATECHOL
79-11-8	CHLOROACETIC ACID
133-90-4	CHLORAMBEN
57-74-9	CHLORDANE
7782-50-5	CHLORINE
126-99-8	B-CHLOROPRENE / 2-CHLORO-1,3-BUTADIENE
532-27-4	2-CHLOROACETOPHENONE
108-90-7	CHLOROBENZENE
510-15-6	CHLOROBENZILATE
67-66-3	CHLOROFORM
107-30-2	CHLOROMETHYL METHYL ETHER / CMME
542-88-1	BIS-(CHLOROMETHYL) ETHER
----------	CHROMIUM COMPOUNDS
----------	COBALT COMPOUNDS
----------	COKE OVEN EMISSIONS
1319-77-3	CRESOLS / CRESYLIC ACID
95-48-7	o-CRESOL
108-39-4	m-CRESOL
106-44-5	P-CRESOL
98-82-8	CUMENE
----------	CYANIDE COMPOUNDS[2]
94-75-7	2,4-DICHLOROPHENOXYACETIC ACID (including salts and esters)

CAS#	NAME
117-81-7	DI-SEC-OCTYL PHTHALATE / BIS(2- ETHYLHEXYL)PHTHALATE
334-88-3	DIAZOMETHANE
132-64-9	DIBENZOFURANS
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE
84-74-2	DIBUTYL PHTHALATE
106-46-7	1-4 DICHLOROBENZENE
91-94-1	3,3'-DICHLOROBENZIDENE
75-34-3	1,1-DICHLOROETHANE / ETHYLIDENE DICHLORIDE
107-06-2	1,2-DICHLOROETHANE / ETHYLENE DICHLORIDE
111-44-4	DICHLOROETHYL ETHER / BIS(2-CHLOROETHYL)ETHER
542-75-6	1,3-DICHLOROPROPENE
62-73-7	DICHLORVOS
111-42-2	DIETHANOLAMINE
64-67-5	DIETHYL SULFATE
119-90-4	3,3-DIMETHOXYBENZIDINE
60-11-7	DIMETHYL AMINOAZOBENZENE / 4-DIMETHYLAMINOAZOBENZENE
79-44-7	DIMETHYL CARBAMOYL CHLORIDE
77-78-1	DIMETHYL SULFATE
121-69-7	DIMETHYLANILINE
119-93-7	3,3-DIMETHYLBENZIDINE
68-12-2	DIMETHYL FORMAMIDE / N,N-DIMETHYLFORMAMIDE
57-14-7	1,1-DIMETHYLHYDRAZINE
131-11-3	DIMETHYL PHTHALATE
534-52-1	4,6-DINITRO-o-CRESOL (including Salts)
51-28-5	2,4-DINITROPHENOL
121-14-2	2,4-DINITROTOLUENE
123-91-1	1,4-DIOXANE / 1,4-DIETHYLENEOXIDE
122-66-7	1,2-DIPHENYLHYDRAZINE
106-89-8	EPICHLOROHYDRIN
106-88-7	1,2-EPOXYBUTANE
110-80-5	2-ETHOXYETHANOL [3]
140-88-5	ETHYL ACRYLATE
100-41-4	ETHYL BENZENE
51-79-6	ETHYL CARBAMATE / URETHANE
75-00-3	ETHYL CHLORIDE / CHLOROETHANE
106-93-4	ETHYLENE DIBROMIDE / EDB / 1,2-DIBROMOETHANE
107-21-1	ETHYLENE GLYCOL
75-21-8	ETHYLENE OXIDE
96-45-7	ETHYLENE THIOUREA / ETU
151-56-4	ETHYLENIMINE
50-00-0	FORMALDEHYDE

The following pollutants and pollutant source categories are listed as HAPs under section 112(b) but are excluded from the definitions of toxics in the Virginia Regulations:

1. Asbestos NESHAP, 40 CFR 61 Subpart M (for asbestos removal, demolition and installation contact Virginia Department of Labor - 804/786-8009).
2. Fine Mineral Fibers.
3. Radionuclides (including radon).

Attachment A

DEPARTMENT OF ENVIRONMENTAL QUALITY
HAZARDOUS AIR POLLUTANT LIST PAGE 2 OF 2

CAS#	NAME
----------	GLYCOL ETHERS[3]
76-44-8	HEPTACHLOR
118-74-1	HEXACHLOROBENZENE
87-68-3	HEXACHLOROBUTADIENE
77-47-4	HEXACHLOROCYCLOPENTADIENE
67-72-1	HEXACHLOROETHANE
680-31-9	HEXAMETHYL PHOSPHORAMIDE / HMPA
822-06-0	HEXAMETHYLENE DIISOCYANATE
110-54-3	HEXANE
302-01-2	HYDRAZINE
7647-01-0	HYDROGEN CHLORIDE/ HYDROCHLORIC ACID (gas only)
7664-39-3	HYDROGEN FLUORIDE / HYDROFLUORIC ACID
123-31-9	HYDROQUINONE / DIHYDROXYBENZENE
78-59-1	ISOPHORONE
109-59-1	ISOPROPOXYETHANOL [3]
----------	LEAD COMPOUNDS
58-89-9	LINDANE (AND ALL OTHER STEREOISOMERS OF 1,2,3,4,5,6-HEXACHLOROCYCLOHEXANE)
108-31-6	MALEIC ANHYDRIDE
----------	MANGANESE COMPOUNDS
----------	MERCURY COMPOUNDS
67-56-1	METHANOL
72-43-5	METHOXYCHLOR
109-86-4	2-METHOXYETHANOL [3]
74-83-9	METHYL BROMIDE / BROMOMETHANE
74-87-3	METHYL CHLORIDE / CHLOROMETHANE
71-55-6	METHYL CHLOROFORM / 1,1,1-TRICHLOROETHANE
78-93-3	METHYL ETHYL KETONE / MEK / 2-BUTANONE
60-34-4	METHYL HYDRAZINE
74-88-4	METHYL IODIDE/IODOMETHANE
108-10-1	METHYL ISOBUTYL KETONE / HEXONE
624-83-9	METHYL ISOCYANATE
80-62-6	METHYL METHACRYLATE
1634-04-4	METHYL TERT BUTYL ETHER
101-14-4	4,4- METHYLENE BIS(2-CHLOROANILINE)
101-68-8	4,4'-METHYLENE DIPHENYL DIISOCYANATE / MDI
75-09-2	METHYLENE CHLORIDE / DICHLOROMETHANE
101-77-9	4,4-METHYLENE DIANILINE
91-20-3	NAPHTHALENE
----------	NICKEL COMPOUNDS
98-95-3	NITROBENZENE
92-93-3	4-NITRODIPHENYL
100-02-7	4-NITROPHENOL
79-46-9	2-NITROPROPANE
684-93-5	N-NITROSO-N-METHYLUREA / NMU
62-75-9	N-NITROSODIMETHYLAMINE / NDMA
59-89-2	N-NITROSOMORPHOLINE / NMOR
56-38-2	PARATHION
82-68-8	PENTACHLORONITROBENZENE / QUINTOBENZENE
87-86-5	PENTACHLOROPHENOL
108-95-2	PHENOL
106-50-3	P-PHENYLENEDIAMINE
75-44-5	PHOSGENE / CARBONYLCHLORIDE
7803-51-2	PHOSPHINE
7723-14-0	PHOSPHORUS
85-44-9	PHTHALIC ANHYDRIDE
1336-36-3	POLYCHLORINATED BIPHENYLS / AROCHLORS
----------	POLYCYCLIC ORGANIC MATTER / POM[4]
1120-71-4	1,3-PROPANE SULTONE
57-57-8	ß-PROPIOLACTONE
123-38-6	PROPIONALDEHYDE
114-26-1	PROPOXUR / BAYGON
78-87-5	PROPYLENE DICHLORIDE / 1,2-DICHLOROPROPANE
75-55-8	1,2-PROPYLENE IMINE
75-56-9	PROPYLENE OXIDE / 1,2-EPOXYPROPANE
91-22-5	QUINOLINE
106-51-4	QUINONE
----------	SELENIUM COMPOUNDS
100-42-5	STYRENE, MONOMER / VINYL BENZENE
96-09-3	STYRENE OXIDE
1746-01-6	2,3,7,8-TETRACHLORODIBENZO-p-DIOXIN
79-34-5	1,1,2,2-TETRACHLOROETHANE
127-18-4	TETRACHLOROETHYLENE / PERCHLOROETHYLENE
7550-45-0	TITANIUM TETRACHLORIDE
108-88-3	TOLUENE
95-80-7	2,4-TOLUENE DIAMINE / TOLUENE-2,4-DIAMINE
584-84-9	TOLUENE-2,4-DIISOCYANATE / TDI
95-53-4	O-TOLUIDINE
8001-35-2	TOXAPHENE / CHLORINATED CAMPHENE
120-82-1	1,2,4-TRICHLOROBENZENE
79-00-5	1,1,2-TRICHLOROETHANE
79-01-6	TRICHLOROETHYLENE
95-95-4	2,4,5-TRICHLOROPHENOL
88-06-2	2,4,6-TRICHLOROPHENOL
121-44-8	TRIETHYLAMINE
1582-09-8	TRIFLURALIN
540-84-1	2,2,4-TRIMETHYLPENTANE
108-05-4	VINYL ACETATE
593-60-2	VINYL BROMIDE
75-01-4	VINYL CHLORIDE / CHLOROETHYLENE
75-35-4	VINYLIDENE CHLORIDE / 1,1-DICHLOROETHYLENE
1330-20-7	XYLENE ISOMERS AND MIXTURES
95-47-6	O-XYLENE
108-38-3	M-XYLENE
106-42-3	P-XYLENE

[1]For all listing above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical as part of that chemical's infrastructure.

[2]X'CN where X=H' or any other group where a formal dissociation may occur. For example, KCN or $Ca(CN)_2$

[3]Glycol ethers include mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol $R\text{-}(OCH_2CH_2)_n\text{-}OR'$
where: n = 1, 2, or 3
R = alkyl C7 or less, or phenyl or alkyl substituted phenyl
R' = H, or alkyl C7 or less, or carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate

2-Butoxyethanol, 2-Ethoxyethanol, Isopropoxyethanol, and 2-Methoxyethanol meet this definition, but are considered as only one HAP (glycol ethers) for Title V and CAAA §112 purposes. They are also listed individually in this table as a reminder that because they have TLVs, they must be considered separately under Virginia's Toxic Pollutant regulations (9 VAC 5 Chapter 60, Articles 4 and 5).

[4]Includes substituted and/or unsubstituted polycyclic aromatic hydrocarbons and aromatic heterocycle compounds, with two or more fused rings, at least one of which is benzenoid in structure. Polycyclic Organic Matter is a mixture of organic compounds containing one or more of these polycyclic aromatic chemicals which include dioxins and furans. Polycyclic Organic Matter is generally formed or emitted during thermal processes including (1) incomplete combustion, (2) pyrolysis, (3) the volatilization, distillation or processing of fossil fuels or bitumens, or (4) the distillation or thermal processing of non-fossil fuels.